

# Technological innovation and trade competitiveness in the enlarged European Union<sup>\*</sup>

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## **Abstract**

We analyse the role of the enlargement process of the European Union as a factor fostering international competitiveness of EU Member States. We argue that the economic integration process has partially reduced the technological gap between old and new EU Member States, and this pattern of technological innovation can partially explain the strong impulse on the export dynamics of European countries. We have built an augmented gravity model by including the role of technological innovation, proxied by the stock of knowledge at the sector level. By using a dynamic panel data estimator we find three main empirical evidences. First, the enlargement process has produced an overall larger positive impact on export flows for new members than for old ones, and more importantly that sectors with the higher technological content have received the strongest impulse. Second, the augmented gravity model allows shaping the crucial role of technological innovation in fostering export competitiveness. Third, this impact seems to be stronger for old EU member states than for new ones. The policy implication we derive is that the more the new EU members catch up technologically as a result of the integration process, the more they will benefit in terms of economic development.

**Keywords:** EU enlargement, gravity model, international trade, technological innovation

**J.E.L. codes:** F14; F15; O14; O33

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<sup>\*</sup> The authors gratefully acknowledge the financial support received from the Italian Ministry of Education, Universities and Research (Scientific Research Program of National Relevance 2007 on “European Union policies, economic and trade integration processes and WTO negotiations”). We also thank participants in the 11<sup>th</sup> Annual Conference of the European Study Group held in Rome University Tor Vergata (September 2009) for their helpful comments. We also thank the participants in the 2<sup>nd</sup> PRIN Workshop for giving us suggestions on a first version of this work. We are particularly indebted to Stefano Colangelo and Marco Della Chiara for their research assistance. The usual disclaimers apply.

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